

Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

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GENERAL INFORMATION:

Name:	Kingsford Manufacturing Company
Address:	Pulaski County, PO 487, Burnside, KY 42519
Date application received:	September 25, 2003
SIC/Source description:	2861/Charcoal Briquet Manufacturing
EIS #:	21-199-00018
Application log number:	56021
Permit number:	021-03-018R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
<u>X</u> Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input checked="" type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures

[] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Controlled (tpy)	Uncontrolled (tpy)
PM	507	150,196
PM ₁₀	349	120,113
SO ₂	212	212
NO _x	453	453
CO	39	3110
VOC	221	3566
Methanol	14	1379

SOURCE DESCRIPTION:

An application for a major revision to the Title V/PSD Permit, V-03-018, for the Kingsford Manufacturing Company (Kingsford) was received on September 25, 2003. The application includes the following:

- ? Modifications to emission unit EU-01, Wood Receipt and Storage;
- ? Replacement and increased capacity of emission units EU-02, Wood Dryer and Retort Furnace with After Combustion Chamber and EU-07, Briquet Dryer A; and
- ? The installation of a new emission unit EU-38, Briquet Cooler A.

There will also be increased potential emissions from emission units EU-05 Briquet Manufacturing Dust Collector and EU-11 Plant Roads – Paved and Unpaved, but no physical change in, or change in the method of operation. Therefore, these units are not subject to modified unit regulations under Prevention of significant deterioration of air quality, 401 KAR 51:017.

SOURCE PROCESS DESCRIPTION:

The source manufactures charcoal and flavored briquets. When making charcoal briquets, wet wood chips and sawdust (hogfuel) are received in trucks and unloaded on a tilt-dump. A bulldozer is used for pile management and to feed the material to the drag chain to the infeed conveyor system. The sizing and infeed system conveys hogfuel from a drag pit via a belt conveyor from the woodpile to a sizing system consisting of screens and a hammermill.

Hogfuel is dried in a rotary dryer and then conveyed to a multi hearth furnace. The dried wood is

continuously transferred from hearth via rabble arms in the retort furnace, where the wood is pyrolyzed to form carbonaceous char. After passing through six hearths, the char is quenched with water as it leaves the retort furnace, and is then conveyed to storage in char silos.

Raw materials used to make briquets are stored in silos before being processed in the Mixing and Briquetting Section. Materials are received from railcars, trucks, and bags. The silos are equipped with bin vent filters that control particulate matter emissions.

Retort char and other carbonaceous materials are combined in a screw mixer and then conveyed to a holding tank. Minor ingredients are wetted and added to the other materials in a mixer. Steam is used to cook starch before adding the starch binder to the mixer. The mixed material is then transferred to briquet presses and continuously pressed into briquets. The briquets are then conveyed, split into three streams, and dropped onto beds, which are conveyed through the three briquet dryers.

Dried briquets are conveyed through cooling zones where ambient air is passed through the briquet beds to cool the briquets prior to storage.

Cooled briquets pass through screens to remove broken particles for recycling, and then the briquets are conveyed to briquet silos via bucket elevators. Briquets are conveyed from the silos to the packaging building, where they are filled into required bag sizes, palletized and shrink wrapped, and then transferred to warehouses for shipping. After the briquets are bagged, the bags are sealed with hot melt adhesive and are then coded with ink jet printers.

Some of the dried briquets undergo a solvent treatment process to produce the solvent treated charcoal briquet product.

The flavored briquets are not formulated from char. The briquets consist of sized wood and lime, with starch added as a binder. The briquettes are mixed, pressed and dried in the existing charcoal briquetting operations.

EMISSION AND OPERATING CAPS DESCRIPTION:

An air quality permit to construct and operate a Solvent Treated Briquet (STB) production line was issued on June 9, 1998, subject to Prevention of Significant Deterioration (PSD) regulations. Lighter fluid usage rate for the STB production line shall not exceed 1,014 gallons/hour (averaged on a weekly basis) and 6.63 million gallons in any consecutive twelve month period. Volatile Organic Compounds (VOC) emissions from the after combustion chamber afterburner shall not exceed 3.3 lbs/hour and 10.8 tons in any consecutive twelve months period due to the solvent treated briquet line production.

An amendment to the Title V application was received on May 3, 1999 for the addition of a new lighter fluid bottling line at the plant. VOC emissions will not exceed approximately 5 tons per year from this new emission unit, based on the requested operating restriction through federally enforceable limitations of 6.0 million gallons per year of lighter fluid bottled at the plant.

OPERATIONAL FLEXIBILITY: N/A